

depends upon the injury done to the plants, but this depends, of course, entirely upon the nature of the plant. The reports here tabulated generally state that damage was done to tender vegetation, and it can generally be assumed that a frost, which is known to have injured the tenderest early vegetables, as raised in the forcing houses of the gardeners, is likely to be reported as a destructive frost. By a heavy frost is meant one that injures fruit and grains that are raised in the open air under more natural conditions; even in the latter case, however, the extent of the injury will largely depend upon the location of the field, viz., whether in a quiet valley or on an elevated spot. In general, therefore, the tabulation of frosts must be considered as simply equivalent to showing the places and dates at which the surface of the leaves cooled down to

32° F., or lower, before the cooling was stopped by the formation of dew, fog, or cloud, or by the wind.

5th.—North Dakota: New Salem.

6th.—Toledo, Ohio; the minimum temperature at the station was 41.2, being the lowest on record for June. Illinois: Riley, Winnebago. Wisconsin: Meadow Valley; frost on both 5th and 6th. Illinois: Princeton, Champaign, Rockford, Jacksonville, Decatur, Greenup. Ohio: Cleveland, said to be the heaviest frost since 1859 in northwestern Ohio.

7th.—Indiana: Indianapolis and Kokomo. Ohio: Hedges.

8th.—Colorado: T. S. Ranch. Connecticut: Falls Village.

11th.—Nevada: Reno.

14th.—Wyoming: Saratoga.

20th.—Arizona: Show Low.

PRECIPITATION.

[In inches and hundredths.]

The distribution of precipitation for the month of June, 1894, as determined by reports from about 2,000 stations, is exhibited on Chart III. The numerical details are also given in Tables I, II, and III; the first of these gives the average departures from the normal for each district, whereas the average departure for each State is given in the chapter on State Weather Services.

NORMAL PRECIPITATION FOR JUNE.

The normal precipitation for the month of June is less than 1 in the middle plateau, the middle Pacific and southern Pacific regions. Between 1 and 2 in the southern and northern plateau regions; from 2 to 4 in the north Pacific, northern slope, middle slope, and southern slope regions, North Dakota, upper and lower Lake regions, middle Atlantic and New England regions; from 4 to 6 in the Ohio Valley and Tennessee, the Gulf States, and south Atlantic States.

PRECIPITATION FOR CURRENT MONTH.

The total precipitation for June was heaviest in the Florida Peninsula, where it was from 10 to 15; a region exceeding 8 occurred in southern Louisiana and the adjacent coast of Texas. Small areas of 6 occurred in western Minnesota, the eastern portion of North Dakota, and South Dakota, also in western Missouri, eastern Kansas, and Nebraska; only a trace of rain was reported from Arizona, southern California, and southern New Mexico.

CURRENT DEPARTURES FROM NORMAL PRECIPITATION.

The precipitation for June was most decidedly in excess of the normal in the middle Atlantic slope, where it was about twice the average amount. It was most decidedly deficient in the east Gulf States, where it was only one-third of the usual amount. The largest deficits were: Pensacola, 5.3; Little Rock, 4.3; Mobile, 4.2. The largest excesses were Galveston and Augusta, 4.9.

Considered by districts, the precipitation for June, 1894, when compared with the normal for the month, furnishes the departures given in Table I, as expressed in inches, and also the corresponding following percentages, as found by dividing those departures by the normal precipitation for June (precipitation is in excess when the percentage of the normal exceeds 100):

Below the normal: New England States, 40; middle Atlantic States, 60; south Atlantic States, 71; Key West, 80; east Gulf States, 38; west Gulf States, 72; Ohio Valley and Tennessee, 63; lower Lake region, 79; upper Lake region, 95; upper Mississippi Valley, 37; Missouri Valley, 92; northern slope, 92; southern plateau, 62; northern plateau, 77.

Above the normal: North Dakota, or the extreme northwest, 120; middle slope, 204; southern slope (Abilene), 122; middle plateau, 272; north Pacific, 115; middle Pacific, 128; southern Pacific, 100.

The following table shows for certain stations, as reported by voluntary observers, the normal and extreme total precipitation for this month:

State and station.	(1) Average for the month of June.	(2) Length of record.	(3) Total for June 1894.	(4) Departure from average.	(5) Extremes for June.			
					Greatest.		Least.	
					Amt.	Year.	Amt.	Year.
Arizona.	Inches.	Years	Inches.	Inches.	Inches.		Inches	
Fort Apache	0.60	18	0.00	— 0.60	3.27	1882	0.00	†
Whipple Barracks	0.15	23	T.	— 0.15	1.24	1872	0.00	†
Arkansas.								
Keesee Ferry.....	4.95	12	2.06	— 2.89	7.14	1882	2.06	1894
California.								
Riverside.....	0.06	13	0.04	— 0.02	0.52	1884	0.00	*
Colorado.								
Las Animas.....	0.69	11	0.03	— 0.66	2.79	1884	0.05	1890
Florida.								
Merritts Island.....	7.40	16	6.77	— 0.63	14.28	1889	3.32	1878
Georgia.								
Forsyth.....	4.82	20	2.21	— 2.61	11.14	1886	1.48	1879
Idaho.								
Boise Barracks	0.91	20	0.19	— 0.72	3.41	1884	T.	1893
Fort Sherman.....	1.33	10	.....	.....	2.11	1885	0.16	1882
Indiana.								
Lafayette.....	4.19	12	3.54	— 0.65	9.10	1882	1.93	1893
Iowa.								
Oresco	5.37	21	3.00	— 2.37	11.71	1890	2.46	1887
Kansas.								
Independence	5.13	22	2.63	— 2.50	11.26	1881	2.05	1875
Salina.....	3.67	10	3.97	+ 0.30	6.11	1883	0.92	1892
Louisiana.								
Grand Coteau.....	6.43	11	2.33	— 4.10	11.31	1886	2.33	1894
Maine.								
Orono	3.51	23	2.90	— 0.61	5.96	1892	0.73	1880
Maryland.								
Cumberland.....	3.82	22	1.64	— 2.18	10.08	1892	0.86	1885
Michigan.								
Kalamazoo.....	4.78	18	1.64	— 3.14	8.10	1883	1.64	1894
Missouri.								
Sedalia.....	5.43	15	6.46	+ 1.03	9.24	1891	1.11	1890
Montana.								
Fort Custer.....	2.73	13	2.03	— 0.70	5.02	1891	0.90	1889
Nebraska.								
Fort Robinson.....	2.99	10	3.16	+ 0.17	11.91	1892	0.60	1890
Genoa (near).....	4.24	18	4.80	+ 0.56	8.48	1891	1.50	1892
Nevada.								
Browns	0.23	23	.....	.....	1.13	1878	0.00	†
Carson City	0.41	16	1.14	+ 0.73	1.97	1884	0.00	1893
New Hampshire.								
Hanover	3.69	22	2.12	— 1.57	7.42	1892	1.74	1873
New Mexico.								
Fort Wingate	0.61	22	0.00	— 0.61	3.15	1873	0.00	†
New York.								
Cooperstown	4.15	23	2.62	— 1.53	7.31	1872	1.94	1873
Plattsburg Barracks	2.98	23	3.52	+ 0.54	7.62	1892	1.27	1881
North Carolina.								
Lenoir	4.27	22	3.95	— 0.32	10.30	1884	0.90	1881
Oklahoma.								
Fort Reno.....	4.54	11	1.10	— 3.44	10.33	1885	0.28	1888
Fort Sill	3.71	22	1.04	— 2.67	8.16	1885	0.21	1881
Fort Supply	2.75	14	1.31	— 1.44	5.44	1885	0.40	1874
Oregon.								
Bandon.....	1.76	16	4.47	+ 2.71	6.11	1881	0.12	1883

Departures from average precipitation—Continued.

State and station.	(1) Average for the month of June.	(2) Length of record.	(3) Total for June, 1894.	(4) Departure from average.	(5) Extremes for June.			
					Greatest.		Least.	
					Amt.	Year.	Amt.	Year.
Pennsylvania.	Inches.	Years	Inches.	Inches.	Inches.	1892	1873	
Dyberry.....	2.94	23	2.86	— 0.08	6.07	1.13		
Grampian.....	4.37	16	2.07	— 2.30	9.85	2.07	1894	
Wellsville.....	6.00	15	1.89	— 4.71	17.47	1.42	1893	
South Carolina.								
Statesburg.....	3.92	13	1.33	— 2.59	7.27	1.33	1894	
South Dakota.								
Fort Sully Texas.	3.31	23	4.50	+ 1.19	6.41	1.50	1871	
Austin.....	3.12	18	1.00	— 2.12	8.32	0.00	1881	
Silver Falls.....	2.29	7	0.28	— 2.01	3.84	0.28	1894	
Utah.								
Terrace.....	0.22	21	.....	.....	1.23	0.00	†	
Vermont.								
Stratford.....	3.54	21	6.15	+ 2.61	7.86	1.60	1884, '85	
Virginia.								
Dale Enterprise.....	5.46	14	1.40	— 4.06	11.00	1.40	1894	
Washington.								
Fort Townsend.....	1.45	19	3.26	+ 1.81	4.10	0.24	1886	
West Virginia.								
Parkersburg.....	3.66	9	6.31	+ 2.65	6.31	1.30	1885	
Wisconsin.								
Madison.....	4.59	21	3.94	— 0.65	9.31	1.08	1886	
Wyoming.								
Fort Washakie.....	1.03	10	0.41	— 0.62	2.98	T.	1881	

*Generally.

† Frequently.

ACCUMULATED PRECIPITATION.

The total accumulated departures from normal precipitation from the beginning of the year to the end of June are given in the second column of the following table; the third column gives the ratio of the current accumulated precipitation to its normal value:

Districts.	Accumulated	Accumulated	Districts.		Accumulated	Accumulated
	departures	precipitation	Inch.	Per ct.	departures	precipitation
New England.....	—5.70	75	Upper Lake.....	2.10	113	
Middle Atlantic.....	—3.50	84	North Dakota (Ex. N.W.)	2.70	129	
South Atlantic.....	—7.20	72	Northern slope.....	0.20	102	
Key West.....	—3.70	73	Middle slope.....	2.10	111	
East Gulf.....	—4.80	84	Middle plateau.....	0.40	105	
West Gulf.....	—3.10	87	Northern plateau.....	3.20	128	
Ohio Valley and Tennessee.....	—4.00	84	North Pacific.....	II.00	135	
Lower Lake.....	—0.80	96				
Upper Mississippi.....	—4.60	74				
Missouri Valley.....	—2.84	83				
Southern slope (Abilene).....	—0.40	98				
Southern plateau.....	—0.90	93				
Middle Pacific.....	—2.10	89				
South Pacific.....	—4.60	46				

YEARS OF LEAST PRECIPITATION FOR JUNE.

The precipitation for the current month was the least on record for the month of June at the regular Weather Bureau stations shown in the following table:

Station.	Current precipitation.		Previous minimum.	
	Amount.	Departure.	Amount.	Year.
St. Paul, Minn.....	1.51	—3.0	1.61	1889
Springfield, Ill.....	1.56	—3.8	1.99	1893
St. Louis, Mo.....	1.12	—3.9	2.00	1874
Cairo, Ill.....	1.04	—3.5	1.45	1890
Fort Smith, Ark.....	1.20	—3.2	2.10	1882
Little Rock, Ark.....	0.26	—4.3	1.96	1882
Pensacola, Fla.....	0.87	—5.3	2.21	1890
Mobile, Ala.....	1.85	—4.2	2.35	1879
Knoxville, Tenn.....	1.43	—2.9	1.99	1890
Raleigh, N. C.....	1.75	—3.7	2.37	1890
Washington, D. C.....	1.24	—3.0	1.53	1875
Toledo, Ohio.....	1.76	—1.8	2.00	1893
Columbus, Ohio.....	1.12	—2.4	1.62	1888
Pittsburg, Pa.....	0.61	—3.0	1.47	1876
New York, N. Y.....	0.86	—2.6	1.18	1891
New Haven, Conn.....	0.49	—2.8	1.21	1880
New London, Conn.....	0.53	—2.8	0.58	1873
Block Island, R. I.....	0.51	—2.6	0.62	1888
Vineyard Haven, Mass.....	1.47	—0.9	1.69	1888
Nantucket, Mass.....	0.81	—1.9	1.51	1888
Northfield, Vt.....	1.71	—2.3	2.04	1891

YEARS OF GREATEST PRECIPITATION FOR JUNE.

The precipitation for the current month was the greatest on record for the month of June at the regular Weather Bureau stations shown in the following table:

Station.	Current precipitation.		Previous maximum.	
	Amount.	Departure.	Amount.	Year.
Moorhead, Minn.....	7.70	+	3.6	1884
Columbia, Mo.....	12.49	+	8.6	1892
Kansas City, Mo.....	8.16	+	3.0	1892
Galveston, Tex.....	9.89	+	4.9	1888

EXCESSIVE PRECIPITATION.

The following tables for June, 1894, show, by States, the number of stations reporting total precipitation to equal or exceed 10.00 inches during this month, 2.50 in 24 hours, and 1.00 in 1 hour:

Monthly precipitation to equal or exceed 10.00.

State.	Number of stations.	State.	Number of stations.
Kansas.....	5	Louisiana.....	2
Florida.....	3		

Daily precipitation to equal or exceed 2.50 in 24 hours.

State.	Number of stations.	Dates.	State.	Number of stations.	Dates.
Kansas.....	19	8, 8-9, 9, 9-10, 10-11, 18-21, 21, 23, 24, 24-25, 25-26,	Mississippi.....	5	11, 19, 20, 21, 23,
Missouri.....	10	8-9, 21, 24-25, 25-26,	Nebraska.....	4	14, 20-21, 23,
Florida.....	8	1, 6, 6-7, 21-22, 25, 27, 28, 30,	North Dakota.....	4	27, 27-28, 28,
Wisconsin.....	7	16-17, 17, 23,	Illinois.....	2	17, 25-26,
Georgia.....	6	24, 24-25, 25-26, 28,	Iowa.....	2	22, 23-24,
Minnesota.....	6	11, 14, 23, 25-27, 27-28,	Kentucky.....	2	26, 26-27,
Louisiana.....	5	9-10, 11, 17, 20-21,	Michigan.....	2	12, 19,

Hourly precipitation to equal or exceed 1.00.

Missouri.....	10	9, 21, 24, 25, 26, 30,	Colorado.....	3	7, 16, 24,
Kansas.....	8	23, 25,	Massachusetts.....	3	30,
Minnesota.....	8	15, 23, 25, 26, 27, 29,	North Carolina.....	3	24, 28, 30,
Georgia.....	6	17, 21, 26, 30,	West Virginia.....	2	17, 21-22, 22, 26,
New York.....	6	16, 17, 24, 25, 29, 30,	Illinois.....	2	23-25,
Ohio.....	6	16, 19, 25,	Indiana.....	2	21, 24,
Alabama.....	5	14, 16, 18, 25,	Kentucky.....	2	24, 26,
Florida.....	5	1, 3, 10, 20, 25,	Nebraska.....	2	21, 23,
Louisiana.....	5	6, 11, 15, 17, 19, 23,	Wisconsin.....	2	23, 26,
Michigan.....	5	12, 15, 17, 24, 28,	Arkansas.....	1	20,
Mississippi.....	4	11, 19, 20,	New Hampshire.....	1	30,
Virginia.....	4	19, 20, 29,	New Jersey.....	1	17, 30,

Excessive precipitation, by stations, for June, 1894.

State and station.	Monthly rainfall to inches, or more.	Rainfall 2.50 inches, or more, in 24 hours.	Rainfall 1 inch, or more, in one hour.	
			Amt.	Day.
Alabama.	Inches.	Inches.	Inches.	h. m.
Eufaula, Ala.....	.....	.....	1.80	0 47
Marion.....	.....	.....	1.00	0 50
Newton.....	2.57	25	.....	.....
Pushmataha.....	.....	.....	1.23	1 00
Scottsboro.....	.....	.....	1.15	1 00
Wilsonville.....	.....	.....	1.10	0 40
Arkansas.	Arkansas.	Arkansas.	.....	.....
Rison.....	.....	.....	1.35	1 00
Colorado.	Colorado.	Colorado.	1.10	1 05
Colorado Springs.....	.....	.....	1.00	0 50
Kit Carson.....	.....	.....	1.00	1 00
Vernon.....	.....	.....	1.25	1 00
Florida.	Florida.	Florida.	.....	.....
Avon Park.....	3.20	1	3.20	2 30

Excessive precipitation—Continued.

State and station.	Monthly rainfall 10 inches, or more.	Rainfall 2-50 inches, or more, in 24 hours.		Rainfall of 1 inch, or more, in one hour.		Amt.	Day.
		Amt.	Day.	Amt.	Time.		
<i>Florida—Continued.</i>							
Fort Meade	14-32	3.71	25				
Do.	3-34	30					
Homeland	14-39	2.32	25				
Jacksonville				1.15	0 54	20	
Key West				1.08	1 00	10	
Lake City		2.58	28				
Myers	15-55	2.72	27				
New Smyrna		2.85	21-22		1.56	0 30	3
Orlando				3-85	6		
Plant City				4-05	6-7		
St. Francis Barracks						2.39	1 00
Tarpon Springs							25
<i>Georgia.</i>							
Alapaha					1.22	0 30	26
Augusta		2-52	28		1.00	1 00	17
Do.					1.65	0 57	30
Canton					2.03	1 20	21
Hepsibah					1.30	1 20	21
Leverett					1.50	0 40	21
Lumpkin		3-72	25-26		2.67	1 30	26
Morgan		3-55	26				
Reynolds		2.98	24-25				
Rome		2.49	24				
Waynesboro		3-05	28				
<i>Illinois.</i>							
Clear Creek		3.00	17				
Peoria					1.10	1 00	23
Rushville		3-14	25-26		2.47	2 30	25
<i>Indiana.</i>							
Cambridge City					1.37	1 00	24
Rushville					2.24	0 50	21
<i>Iowa.</i>							
Ames		2.50	23				
Sac City		3-75	23-24				
<i>Kansas.</i>							
Beloit		3.50	24				
Burlington		2.75	8-9				
Collyer		4.00	8				
Concordia		12.49	3-01	20-21	2.00	1 00	15
Do.		3-14	24-25	2.00	2 00		20
Do.					2.50	2 00	25
Dodge City					1.38	1 00	21
Downs		10-03	3-51		3-51	3 00	23
Emporia		4-00	9-10				
Halstead		11-46	5-35		9		
Do.			4-41		21		
Hutchinson			3-14		9		
Do.			3-23		21		
Lebo			2-84	9-10			
Do.			2.68	18			
Macksville			3.65	21			
Marion			2.91	9-10			
Mount Hope		14-98	8.40	9-10			
Do.			3-20	21			
Olathe		2-53	10-11				
Pleasant Dale		4-80	20-21				
Quinter		3-00	8				
Rome					2.10	1 15	18
Sedan					1.86	0 35	18
Wa Keeney					1.50	1 00	8
Wakefield					1.20	0 24	16
Wichita			3-13	8-9			
Do.		4-07	21	2.00	2 00		21
Winfield		4-25	10-11				
Winona		2-50	24				
Yates Center		11-00	7-10	25			
<i>Kentucky.</i>							
Hendricks			2.80	26			
Lexington					1.10	1 00	26
Middlesboro			3-00	26-27			
Mount Sterling					1.65	0 30	24
<i>Louisiana.</i>							
Abbeville		3-05	17				
Amite		5-63	20-21				
Franklin					1.29	1 00	6
Do.					1.97	0 40	19
Houma		4-00	9-10				
Jeanerette					2.00	1 00	15
Lake Charles		10-08					
Maurepas					1.00	0 20	11
Roseland		3-28	20-21		1.23	1 00	6
Schriever		2-72	II				
Thibodaux		10-06			1.74	0 30	17
Do.					2.24	1 00	23
<i>Massachusetts.</i>							
Ludlow Center					1.45	1 00	30
Mount Nonotuck					1.50	1 00	30
Turners Falls					1.42	0 35	30
<i>Michigan.</i>							
Bear Lake		3-05	19				
Grand Rapids					1.03	0 30	17
Grape					1.35	1 00	28
Lathrop		3-00	12		3.00	1 30	12
Ovid					1.76	0 55	24
Pontiac					1.65	0 45	15
<i>Minnesota.</i>							
Clearwater		2-64	II				
Collegeville					1.08	0 45	27
Cromwell		2-70	14				
Dawson		2-64	25	2.64	2 00		25
Grand Meadow		3-10	23	3.10	2 00		23

Excessive precipitation—Continued.

State and station.	Monthly rainfall 10 inches, or more.	Rainfall 2-50 inches, or more, in 24 hours.		Rainfall of 1 inch, or more, in one hour.		Amt.	Day.
		Amt.	Day.	Amt.	Time.		
<i>Minnesota—Continued.</i>							
Lake Winnibigoshish						1-43	1 00
Montevideo						1-00	0 30
Moorhead						2-02	1 00
Morris						3-50	25-27
New Ulm							
St. Cloud							
<i>Mississippi.</i>							
Brookhaven						3-10	20
Itta Bena						3-41	23
Leakesville						2-65	11
Logtown							
Meridian							
Port Gibson							
Woodville							
<i>Missouri.</i>							
Arthur						1-00	1 00
Bethany						1-40	1 00
Downing						2-08	1 00
East Lynne						2-58	25
Eight Mile						3-04	24-25
Emma						2-50	25
Fairport							
Fox Creek							
Harrisonville							
Kansas City							
Kidder							
Marshall							
Mexico							
Oakfield							
Princeton							
Sedalia							
Shelbyina							
Stellada							
<i>Nebraska.</i>							
Crete						3-66	23
David City						2-50	20-21
Franklin							
Haigler							
Madrid						5-50	14
Minden						3-29	23
<i>Nevada.</i>							
Virginia City						2-80	5-6
<i>New Hampshire.</i>							
Alstead							1-00
<i>New Jersey.</i>							
Plainfield						2-43	1 65
Do.						1-21	1 00
<i>New York.</i>							
Albany							2-12
Brentwood							1-00
Glen Falls							1-50
Gloversville							1-33
Potsdam							2-37
Saranac Lake							1-83
Watertown							2-55
<i>North Carolina.</i>							
Falkland							
Forest Hill							
Greensboro							
Horse Cove							
<i>North Dakota.</i>							
Berlin						3-58	27-28
Devils Lake						3-63	27-28
Fargo						2-60	28
Jamesstown						3-68	27
Napoleon							1-00
<i>Ohio.</i>							
Defiance						3-19	28
Garretttsville						1-52	0 55
Montpelier						1-00	0 53
Napoleon						4-33	28
<i>Oklahoma.</i>							
Arapaho						3-57	22
Oklahoma						2-68	15-16
<i>Pennsylvania.</i>							
Emporium							1-14
Hollidaysburg							1-62
Phoenixville						3-17	24
Somerset							1-15
<i>South Carolina.</i>							
Allendale							1-80
Batesburg						3-10	25
Blackville							3-10
Cheraw							2-20
Flint Hill							1-45
Greenville							1-40
Hollands Store							1-30
McCormick							

Excessive precipitation—Continued.

State and station.	Monthly rainfall to inches, or more.	Rainfall 2.50 inches, or more, in 24 hours.		Rainfall of 1 inch or more, in one hour.		
		Amt.	Day.	Amt.	Time.	Day.
<i>South Dakota—Continued.</i>						
Ordway.	Inches.	5.33	27	1.25	0 30	18
Webster City		2.74	27-28	1.12	1 00	29
Tennessee.				1.26	0 55	15
Clarksville.				1.04	1 00	16
Hohenwald.						
Memphis.						
Rogersville	Texas.	3.39	26-27			
Amarillo.						
Benton.		2.64	14-15	1.25	0 22	16
Columbia.		7.50	13	2.50	0 40	14
Forestburg.		2.75	14-15	1.85	1 00	15
Galveston.		4.75	12	1.89	1 00	12
Hallettsville.				1.86	1 30	13
Do.						
Haskell.		3.09	12			
Llano.		3.00	13	3.00	2 00	13
Orange.		2.68	12-13			
Do.		3.35	15			
Bobby.		5.70	1			
Victoria.	Virginia.			1.96	1 30	22
Irwin.				1.75	1 15	19
Norfolk.				1.50	1 00	20
Spottsville.				1.25	1 00	29
Warrenton.	West Virginia.			1.60	1 30	20
Burlington.				1.20	1 00	17
Fairmont.				1.42	0 55	22
Parkersburg (W. B.).		2.92	21-22	1.52	1 11	21-22
Do.				1.40	0 52	22
Do.				1.52	0 30	26
Parkersburg (V. O.).	Wisconsin.	2.85	21-22			
Beaver Dam.		2.54	16-17			
Belleville.		3.25	16-17			
Chilton.				1.52	1 00	26
Columbus.		3.25	16-17			
Green Bay.		3.50	16-17			
Harvey.		5.67	16-17			
Hillsboro.		2.88	17			
Spooner.		3.00	23	3.00	1 00	23

FREQUENCY OF EXCESSIVE PRECIPITATION SINCE 1871.

The following tables show the number of years for which monthly precipitation to equal or exceed 10.00 inches, daily precipitation to equal or exceed 2.50 inches, and hourly precipitation to equal or exceed 1.00 inch has been reported for June in the several states and territories during the last 24 years:

Frequency of excessive monthly precipitation.

State.	No. years noted.	State.	No. years noted.
Florida.	18	New York.	
Iowa.	16	Wisconsin.	
Texas.	14	Michigan.	
Louisiana.	14	Pennsylvania.	
Georgia.	13	Mississippi.	
Missouri.	11	The Dakotas.	
Kansas.	10	Indian Territory.	
Illinois.	9	New Jersey.	
Nebraska.	9	Virginia.	
North Carolina.	9	Maryland.	
Alabama.	8	Vermont.	
Indiana.	8	Colorado.	
South Carolina.	8	Connecticut.	
Minnesota.	7	Rhode Island.	
New Hampshire.	6	Washington.	
Ohio.	5	Arkansas.	
Tennessee.	5		

Frequency of excessive daily precipitation.

Texas.	21	Tennessee.	
Florida.	20	South Carolina.	
Illinois.	20	Ohio.	
Kansas.	19	Indiana.	
Iowa.	18	Maryland.	
Missouri.	18	Alabama.	
Georgia.	16	Louisiana.	
Nebraska.	16	Mississippi.	
The Dakotas.	16	Massachusetts.	
Minnesota.	15	Virginia.	
New York.	15	Arkansas.	
Michigan.	14	Connecticut.	
North Carolina.	14	New Jersey.	
Pennsylvania.	14	Indian Territory.	

Frequency of excessive daily precipitation—Continued.

State.	No. years noted.	State.	No. years noted.
Kentucky.	7	Delaware.	2
Wisconsin.	6	Rhode Island.	2
Maine.	5	Idaho.	1
West Virginia.	5	New Mexico.	1
Vermont.	4	Wyoming.	1
Montana.	3	Washington.	1
New Hampshire.	3	Nevada.	1
Colorado.	2		

Frequency of excessive hourly precipitation.

State.	No. years noted.	State.	No. years noted.
Kansas.	19	Mississippi.	8
Texas.	18	New York.	8
Georgia.	16	Wisconsin.	6
Iowa.	15	Alabama.	6
Florida.	15	New Jersey.	6
Illinois.	15	Kentucky.	4
Michigan.	15	West Virginia.	4
Nebraska.	14	Maryland.	3
Tennessee.	13	Connecticut.	3
Missouri.	12	Colorado.	3
North Carolina.	12	Massachusetts.	3
Pennsylvania.	12	New Hampshire.	3
The Dakotas.	12	Maine.	2
Ohio.	11	New Mexico.	2
Virginia.	11	Indian Territory.	2
Louisiana.	10	Wyoming.	2
Minnesota.	10	Arizona.	1
South Carolina.	10	Idaho.	1
Indiana.	9	Montana.	1
Arkansas.	8	Vermont.	1

MAXIMUM RAINFALL FROM SELF-REGISTERING GAUGES.

The following table gives the heaviest rainfall during June, 1894, for periods of 5, 10, and 60 minutes, as recorded on self-registering rain gauges at regular stations of the Weather Bureau. This record refers strictly to rainfall. About 37 stations are furnished with self-registering-float-rain gauges and 6 with the self-registering-weighing-rain-and-snow gauge. The float gauge does not record snowfall, and both forms are liable to be interrupted by snow and ice:

Maximum rainfall in one hour or less.

Station.	Maximum rainfall in—					
	5 min.	Date.	10 min.	Date.	1 hour.	Date.
Atlanta, Ga.	0.30	17	0.35	17	0.49	17
Baltimore, Md.	0.30	12	0.40	12	0.60	24
Bismarck, N. Dak.	0.11	27	0.13	27	0.25	27
Boston, Mass.	0.16	21	0.22	21	0.30	21
Buffalo, N. Y.	0.24	27	0.35	27	0.82	27
Cincinnati, Ohio.	0.20	17, 18	0.33	17	0.60	17
Chicago, Ill.	0.26	23	0.32	25	0.43	25
Cleveland, Ohio.	0.14	24	0.23	24	0.42	24
Denver, Colo.	0.05	20	0.07	20	0.22	20
Detroit, Mich.	0.30	24	0.50	24	0.80	24
Dodge City, Kans.	0.27	21	0.40	21	1.38	21
Duluth, Minn.	0.16	28	0.17	27, 28	0.27	27
Eastport, Me.	0.11	23	0.20	23	0.60	23
Galveston, Tex.	0.35	12	0.70	12	1.89	12
Indianapolis, Ind.	0.39	24	0.50	24	0.78	24
Jacksonville, Fla.	0.38	4	0.52	4	1.15	20
Jupiter, Fla.	0.35	6	0.50	6	0.65	6
Kansas City, Mo.	0.32	24	0.46	24	1.07	9
Key West, Fla.	0.25	10	0.38	10	1.08	10
Marquette, Mich.	0.18	24	0.25	24	0.46	24
Memphis, Tenn.	0.55	15	0.80	15	1.26	15
Milwaukee, Wis.	0.25	23, 25	0.40	23	0.85	23
Nantucket, Mass.	0.02	5	0.04	5	0.14	5
Nashville, Tenn.	0.26	15	0.49	15	0.79	15
New Orleans, La.	0.30	17	0.50	17	0.74	19
New York, N. Y.	0.05	4	0.08	4	0.15	4
Norfolk, Va.	0.45	20	0.80	20	1.50	20
Omaha, Nebr.	0.30	21	0.52	21	0.68	29
Philadelphia, Pa.	0.07	30	0.10	30	0.15	6
Pittsburg, Pa.	0.02	1	0.04	1	0.15	1
Portland, Me.	0.17	11	0.30	11	0.65	11
Portland, Oreg.	0.10	2	0.16	2	0.26	2
Rochester, N. Y.	0.20	17	0.30	17	0.75	17
St. Louis, Mo.	0.08	25	0.14	25	0.27	25
St. Paul, Minn.	0.08	20	0.12	20	0.53	27
Salt Lake City, Utah.	0.04	7	0.08	7	0.27	7
San Diego, Cal.						
San Francisco, Cal.	0.03	2	0.05	2	0.12	3
Savannah, Ga.	0.30	23	0.50	23	0.92	23
Seattle, Wash.	0.05	2	0.08	2	0.22	3
Vicksburg, Miss.	0.35	17	0.60	17	0.75	17
Washington, D. C.	0.09	6	0.15	6	0.26	6
Wilmington, N. C.	0.20	25, 26	0.35	25	0.51	25

* Record incomplete.

† Less than 0.05 in 1 hour.

EXCEPTIONAL PRECIPITATION.

The following tables give exceptionally heavy monthly, daily, and hourly precipitation reported for June, by any station, regular or voluntary, and in any year since 1871:

Exceptional monthly precipitation.

Station and state.	Amt.	Year.	Station and state.	Amt.	Year.
	Inches.			Inches.	
Alexandria, La.	36.91	1886	Hypoluxo, Fla.	23.25	1892
Cheneyville, La.	26.59	1886	Sylvan Park, Mo.	21.86	1872
California, Mo.	23.90	1891	Archer, Fla.	20.19	1892

Exceptional daily precipitation.

Station and state.	Amount.	Date.	Station and state.	Amount.	Date.
	Inches.			Inches.	
Alexandria, La.	22.27	16, 1886	Helena, Ark.	5.60	9, 1877
Point Pleasant, La.	16.55	12-14, 1878	Plattsmouth, Nebr.	5.60	13-14, 1874
Pensacola, Fla.	10.70	29, 1857	Greensboro, N. C.	5.60	17, 1876
Sour Lake, Tex.	9.70	18, 1888	Cameron, La.	5.57	22, 1892
Memphis, Tenn.	9.67	8-9, 1877	Crowley, La.	5.56	6, 1889
Orange, Tex.	9.55	22-24, 1892	Plattsmouth, Nebr.	5.52	8-9, 1874
Memphis, Tenn.	8.95	7-8, 1877	Hardeeville, S. C.	5.50	9, 1885
Clear Lake, Nebr.	8.75	1, 1875	Madrid, Nebr.	5.50	14, 1894
Mobile, Ala.	8.50	26-27, 1888	Evergreen, Ala.	5.50	27, 1888
Mount Hope, Kans.	8.40	9-10, 1894	Rockford, Iowa	5.50	23, 1875
Lebo, Kans.	8.23	26, 1893	New Orleans, La.	5.47	29-30, 1887
Readington, N. J.	8.10	25-26, 1884	Travare, S. Dak.	5.40	5-6, 1892
Cunningham, Kans.	8.00	19-20, 1891	Caldwell, N. Y.	5.40	25-26, 1884
Syracuse, N. Y.	8.00	8, 1876	Aberdeen, Miss.	5.40	21, 1886
Nashua, Iowa	7.50	14, 1880	Corry, Pa.	5.36	4, 1892
Columbia, Tex.	7.50	13, 1894	Jeanerette, La.	5.35	16, 1892
Wellsboro, Pa.	7.45	*1889	Boston, Mass.	5.35	9-10, 1875
Little Rock, Ark.	7.40	28, 1879	Halstead, Kans.	5.35	9, 1894
Colebrook, Conn.	7.40	7-8, 1874	Ordway, S. Dak.	5.33	27, 1894
Salisbury, N. C.	7.39	10, 1883	Sycamore, Ill.	5.33	22-23, 1892
Yates Center, Kans.	7.10	25, 1894	Fort Adams, R. I.	5.30	9-10, 1875
Purdy, Tenn.	7.10	14-15, 1876	Fort Maginnis, Mont.	5.28	20-21, 1888
Salisbury, N. C.	7.10	25, 1885	Galveston, Tex.	5.27	23-24, 1880
Wilmingtn, N. C.	7.03	30, 1876	Merrits Island, Fla.	5.27	23, 1889
Darien, Ga.	7.00	13, 1893	St. Marks, Fla.	5.24	9, 1879
Columbia, Tex.	7.00	17, 1888	Wilmington, N. C.	5.22	2, 1882
Marmaton, Kans.	6.60	15-16, 1889	Fort Clark, Tex.	5.20	18-19, 1877
New Ulm, Tex.	6.50	17-18, 1888	Franklin, La.	5.20	27, 1892
Fort Scott, Kans.	6.45	15-16, 1889	Marquette, Mich.	5.20	20-21, 1878
Galveston, Tex.	6.40	17, 1888	Mascoutah, Ill.	5.20	18, 1892
Archer, Fla.	6.34	27, 1892	Yankton, S. Dak.	5.20	30, 1873
Emile, La.	6.32	22-23, 1890	Carthagena, Ohio	5.18	20, 1870
Alexandria, La.	6.31	15, 1886	Raleigh, N. C.	5.18	28-29, 1889
St. Marys, Ga.	6.20	12-13, 1877	Des Moines, Iowa	5.14	19-20, 1881
Charleston, S. C.	6.16	11-12, 1876	Jacksonville, Fla.	5.12	10-11, 1885
Savannah, Ga.	6.10	26-27, 1887	Savannah, Ga.	5.12	14-15, 1870
Cleburne, Tex.	6.04	2, 1884	Melissa, Tex.	5.10	28, 1878
Columbia, Tex.	6.00	7-8, 1890	Helena, Ark.	5.10	8, 1877
Logan, Iowa	6.00	29-30, 1878	Fort Randall, S. Dak.	5.10	30, 1875
Larned, Kans.	6.00	19, 1878	Cadiz, Wis.	5.07	13-14, 1890
Norfolk, Va.	5.97	16-17, 1893	Bellefontaine, Ohio	5.06	5-6, 1877
Block Island, R. I.	5.97	9-10, 1881	Fayette, Iowa	5.04	3-4, 1890
New London, Conn.	5.97	25-26, 1884	Minden, La.	5.02	23, 1892
Cheneyville, La.	5.90	10, 1889	Omaha, Neb.	5.02	17, 1875
Cameron, La.	5.89	17-18, 1892	Monroe, La.	5.01	5-6, 1890
Edgard, La.	5.85	23, 1890	Beardstown, Ill.	5.00	21, 1885
Mattoon, Ill.	5.85	27, 1888	Grand Meadow, Minn.	5.00	15, 1892
Charleston, S. C.	5.79	7-8, 1893	Marengo, Ind.	5.00	18, 1890
Kingman, Kans.	5.75	19, 1890	Tannersville, N. Y.	5.00	26-27, 1889
Somerset, Mass.	5.74	9-10, 1875	Sandwich, Ill.	5.00	8, 1874
Cape Charles, Va.	5.70	16-17, 1893	Danville, Ky.	5.00	17, 1873
Roby, Tex.	5.70	1, 1894	Burlington, Kans.	5.00	13, 1870
Harvey, Wis.	5.67	16-17, 1894	Ft. Independence, Mass.	5.00	10, 1875
Hazelhurst, Miss.	5.67	5, 1893	Cape Henry, Va.	5.00	16-17, 1893
Amite, La.	5.63	20-21, 1894			

* May 31-June 1.

Exceptional precipitation for one hour or less.

Station and state.	Amount.	Time.	Date.
	Inches.	h. m.	
New York, N. Y.	0.60	0 05	6, 1893
Memphis, Tenn.	0.55	0 05	15, 1891
Cleveland, Ohio	0.47	0 05	3, 1891
Indianapolis, Ind.	0.45	0 05	20, 1893
Norfolk, Va.	0.45	0 05	20, 1894
Tampa, Fla.	0.40	0 05	8, 1893
Bismarck, N. Dak.	0.40	0 05	19, 1893
Savannah, Ga.	0.40	0 05	9, 1884
Do.	0.40	0 05	27, 1889
Jupiter, Fla.	0.40	0 05	19, 1891
Indianapolis, Ind.	0.39	0 05	24, 1894
Jacksonville, Fla.	0.38	0 05	4, 1894
Do.	0.38	0 05	15, 1893
Galveston, Tex.	0.38	0 05	19, 1893
Augusta, Ga.	0.37	0 05	27, 1888
Jupiter, Fla.	0.35	0 05	30, 1893
Galveston, Tex.	0.35	0 05	12, 1894
Jupiter, Fla.	0.35	0 05	6, 1894

Exceptional precipitation for one hour or less—Continued.

Station and state.	Amount.	Time.	Date.
	Inches.	h. m.	
Vicksburg, Miss.	0.35	0 05	17, 1894
Chicago, Ill.	0.35	0 05	20, 1893
Galveston, Tex.	0.35	0 05	7, 1890
New York, N. Y.	0.35	0 05	6, 1890
New Orleans, La.	0.35	0 05	22, 1890
Savannah, Ga.	0.35	0 05	11, 1890
Galveston, Tex.	0.35	0 05	29, 1891
Kansas City, Mo.	0.35	0 05	16, 1891
Do.	0.32	0 05	24, 1894
Detroit, Mich.	0.32	0 05	3, 1893
Cleveland, Ohio	0.30	0 05	10, 1891
Norfolk, Va.	0.30	0 05	13, 1890
New Orleans, La.	0.30	0 05	17, 1894
Atlanta, Ga.	0.30	0 05	17, 1894
Baltimore, Md.	0.30	0 05	12, 1894
Detroit, Mich.	0.30	0 05	24, 1894
Bismarck, N. Dak.	0.30	0 05	14, 1891
Key West, Fla.	0.30	0 05	13, 1893
New Orleans, La.	0.30	0 05	6, 1893
Omaha, Nebr.	0.30	0 05	21, 1894
Savannah, Ga.	0.30	0 05	23, 1894
Cincinnati, Ohio	0.30	0 05	22, 1893
Washington, D. C.	0.30	0 05	21, 1891
Wilmington, N. C.	0.30	0 05	8, 1891
Detroit, Mich.	0.29	0 05	16, 1890
Do.	0.29	0 05	22, 1891
Savannah, Ga.	0.29	0 05	7, 1893
Do.	0.28	0 05	28, 1890
Detroit, Mich.	0.27	0 05	21, 1894
Dodge City, Kans.	0.26	0 05	23, 1894
St. Paul, Minn.	0.26	0 05	15, 1894
Chicago, Ill.	0.26	0 05	14, 1894
Nashville, Tenn.	0.26	0 05	15, 1894
St. Louis, Mo.	0.26	0 05	21, 1893
New York, N. Y.	0.25	0 05	17, 1899
Jupiter, Fla.	0.25	0 05	3, 1890
Kansas City, Mo.	0.25	0 05	21, 1893
Milwaukee, Wis.	0.25	0 05	4, 1893
Wilmington, N. C.	0.25	0 05	7, 1893
Marquette, Mich.	0.25	0 05	14, 1893
St. Louis, Mo.	0.25	0 05	27, 1890
Washington, D. C.	0.25	0 05	17, 1890
Milwaukee, Wis.	0.25	0 05	12, 1894
Do.	0.25	0 05	25, 1894
Cincinnati, Ohio	0.25	0 05	3, 1891
Dodge City, Kans.	0.25	0 05	5, 1891
Eastport, Me.	0.25	0 05	24, 1891
Key West, Fla.	0.25	0 05	10, 1894
Jupiter, Fla.	0.25	0 05	13, 1899
Memphis, Tenn.	0.25	0 05	16, 1891
Do.	0.25	0 05	29, 1891
St. Louis, Mo.	0.25	0 05	16, 1891
St. Matthews, S. C.	0.25	0 05	20, 1894
New York, N. Y.	0.25	0 05	6, 1893
Jupiter, Fla.	0.25	0 05	30, 1893
Tampa, Fla.	0.25	0 05	8, 1893
Galveston, Tex.	0.25	0 05	7, 1899
New Orleans, La.	0.25	0 05	22, 1890
Savannah, Ga.	0.25	0 05	27, 1899
Bismarck, N. Dak.	0.25	0 05	19, 1890
Do.	0.25	0 05	20, 1890
Anna, Ill.	0.25	0 05	19, 1878
Fort Randall, S. Dak.	0.25	0 05	28, 1873
Southington, Conn.	0.25	0 05	29, 1879
Steelville, Mo.	0.25	0 05	13, 1893
Gratiot, Ohio	0.25	0 05	13, 1893
Kennett Square, Pa.	0.25	0 05	22, 1893
Ozark, Ark.	0.25	0 05	14, 1893
Clarinda, Iowa	0.25	0 05	20, 1899
Alapaha, Ga.	0.25	0 05	26, 1890
Potosi, Wis.	0.25	0 05	20, 1890
Webster, S. Dak.	0.25	0 05	15, 1893
Humanasville, Mo.	0.25	0 05	24, 1894
Herrina Prairie, Ill.	0.25	0 05	20, 1893
Lynchburg, Va.	0.25	0 05	4, 1893
Maurepas, La.	0.25	0 05	15, 1894
Sheldon, Minn.	0.25	0 05	11, 1894
Amarillo, Tex.	0.25	0 05	18, 1890
Wakefield, Kans.	0.25	0 05	15, 1894
Sheldon, Minn.	0.25	0 05	16, 1894
Clear Creek, Mont.	0.25	0 05	23, 1890
Lonoke, Ark.	0.25	0 05	13, 1879
Denmark, Iowa	0.25	0 05	25, 1879
Boston, Mass.	0.25	0 05	25, 1879
Alpena, Mich.	0.25	0 05	3, 1890
Ellendale, N. Dak.	0.25	0 05	24, 1890
Statesville, N. C. (near).	0.25	0 05	26, 1893
Galveston, Tex.	0.25	0 05	17, 1876
Keswick, Va.	0.25	0 05	17, 1888
Diamond, Ga.	0.25	0 05	3, 1881
Columbus, Ga.	0.25	0 05	21, 1893
Sandusky, Ohio	0.25	0 05	17, 1891

Exceptional precipitation for one hour and less—Continued.

Station and state.	Amount.	Time.	Date.
	Inches.	h. m.	
Missoula, Mont.	1.84	o 30	13, 1893
Thibodeaux, La.	1.74	o 30	17, 1894
Batesville, Miss.	1.72	o 30	24, 1892
Louisville, Miss.	1.59	o 30	17, 1889
Brooksville, Fla.	1.57	o 30	21, 1893
Orlando, Fla.	1.56	o 30	3, 1894
Newton, Iowa.	1.55	o 30	26, 1882
Parkersburg, W. Va.	1.52	o 30	26, 1894
Carrington, N. Dak.	1.50	o 30	14, 1892
Canton, Pa.	1.50	o 30	27, 1892
Larrabee, Iowa	1.84	o 31	19, 1893
Jacksonville, Fla.	1.81	o 31	26, 1875
Charlotte, N. C.	2.08	o 34	30, 1889
Sedan, Kans.	1.86	o 35	18, 1894
North Lewisburg, Ohio.	1.60	o 35	27, 1879
Palestine, Tex.	1.96	o 36	3, 1883
East Peoria, Ill.	2.65	o 40	13, 1893
Belton, Tex.	2.50	o 40	14, 1891
Oxanna, Ala.	2.00	o 40	25, 1892
Uniontown, Pa.	2.35	o 40	4, 1892
La Crosse, Wis.	1.37	o 40	21, 1884
Wytheville, Va.	2.70	o 44	25, 1875
Dodge City, Kans.	3.24	o 45	19, 1888
Amana, Iowa	2.17	o 45	19, 1878
Charleston, S. C.	2.61	o 50	7, 1893
Wellshoro, Pa.	2.60	o 50	19, 1892
Cumberland, Md.	4.64	o 50	4, 1892
Des Moines, Iowa.	3.00	o 50	24, 1879
Merritts Island, Fla.	3.00	o 50	23, 1889
Spooner, Wis.	3.00	o 50	23, 1894

HAIL.

The following are the dates on which hail fell in the respective States:

Alabama, 17. Arkansas, 20, 26. Colorado, 1 to 9, 14, 15, 16, 20, 21, 22, 24, 25, 27. Connecticut, 4, 12, 18, 15, 30. Delaware, 24. District of Columbia, 13. Florida, 3, 4, 29. Georgia, 29. Idaho, 3, 9, 10, 18, 19, 22. Illinois, 3, 6, 15, 17, 20 to 26, 30. Indiana, 12, 15, 16, 17, 20, 21, 26, 28. Iowa, 9,

15, 16, 20, 22, 23, 25, 26, 27, 30. Kansas, 3, 7 to 10, 15, 18 to 21, 23 to 29. Kentucky, 13, 14, 16, 17, 18, 26. Louisiana, 22, 25. Maine, 11, 17. Maryland, 5, 12, 24, 30. Massachusetts, 1, 2, 4, 7, 11, 17, 23, 30. Michigan, 12, 13, 14, 17, 22, 24, 28, 29. Minnesota, 20, 22, 23, 24, 26 to 29. Mississippi, 4, 9, 14, 16. Missouri, 4, 9, 10, 14, 15, 18, 21, 24, 25, 26, 28, 30. Montana, 1, 3 to 7, 10, 17 to 20, 25, 26.

Nebraska, 8, 9, 14, 16, 18, 20, 23, 25, 27, 29, 30. Nevada, 5, 6, 10, 11, 15. New Hampshire, 1, 7, 18, 19, 23, 30. New Jersey, 4, 13, 16, 19, 30. New Mexico, 1, 2, 4 to 7, 10, 11, 12, 15, 16. New York, 1, 3, 4, 5, 7, 12, 16, 17, 18, 24. North Carolina, 6, 13, 21, 28, 29, 30. North Dakota, 13, 19, 20, 21, 26. Ohio, 4, 12, 13, 16, 18, 21, 23 to 26, 28, 29, 30. Oregon, 2, 3, 9, 10, 14. Pennsylvania, 3, 4, 12, 16, 17, 18, 22, 23. South Carolina, 13, 25, 29, 30. South Dakota, 11, 12, 13, 19, 21, 22, 23, 25 to 28. Tennessee, 5, 12, 15, 16, 29. Texas, 1, 11, 16, 17, 19, 22. Utah, 5 to 8, 13, 20, 23, 26. Vermont, 7, 16, 17. Virginia, 6, 27. Washington, 2, 3, 9, 11, 18. West Virginia, 17, 20, 21, 22, 30. Wisconsin, 9, 15, 21, 22, 23, 25, 27, 28. Wyoming, 14, 15, 19.

Monthly snowfall and amounts on ground on the 15th and at close of month.

State and station.	Total.	15th.	30th.	State and station.	Total.	15th.	30th.
Colorado.	Inches.	Ins.	Ins.	Nevada—Cont'd.	Inches.	Ins.	Ins.
Breckenridge	0.5	0.0	0.0	McGill	1.5	0.0	0.0
Climax	13.1	0.0	0.0	Stofiel	3.0	0.0	0.0
Coma (near)	0.2	0.0	0.0	Winnemucca	0.7	0.0	0.0
Stamford	T.	0.0	0.0	Oregon			
Steamboat Springs	1.0	0.0	0.0	Happy Valley	0.2	0.0	0.0
Sunnyside	2.1	0.0	0.0	Joseph	2.5	0.0	0.0
Pikes Peak	4.8	24.0	13.0	Utah			
Idaho.				Castle Gate	0.5	0.0	0.0
Lake	8.0	0.0	0.0	Logan	T.	0.0	0.0
Nevada.				Randolph	T.	0.0	0.0
Belleville	T.	0.0	0.0	Scotfield	8.5	0.0	0.0
Candelaria	T.	0.0	0.0	Silver Lake	12.0	0.0	0.0
Carson City	0.3	0.0	0.0	Singletree	T.	0.0	0.0
Ely	0.2	0.0	0.0				

WIND.**PREVAILING WINDS.**

The prevailing winds for June, 1894, viz., those that were recorded most frequently at Weather Bureau stations, are shown in Tables I and VIII; they are not given on Chart II, as has hitherto been the custom, but the resultant winds are published instead.

RESULTANT WINDS.

The resultant winds for the current month, as deduced from the hourly records by self-registers at about 67 regular Weather Bureau stations, are given in Table VIII. Other resultants, deduced from the personal observations made at 8 a. m. and 8 p. m., are given in Table IX. These latter resultants are also shown graphically on Chart II, in connection with the isobars based on the same system of simultaneous observation; the small figure attached to each arrow shows the number of hours that this resultant prevailed, on the assumption that each of the morning and evening observations represents one hour's duration of a wind of average velocity; these figures (or the ratio between them and the total number of observations in this month) indicate the extent to which winds from different directions counterbalance each other. The original north, south, east, and west components are given in detail in Table IX.

During June the resultant movement was generally from the southwest in New England and the middle Atlantic States, Ohio Valley and Tennessee, the upper and lower Lake regions, upper Mississippi Valley, and the northern Rocky Mountain slope. The resultant was from the southeast in Florida, the western Gulf States, North Dakota, and the Missouri Valley. The strongest resultants were: Savannah,

Amarillo, Corpus Christi, Galveston, Dodge City, and Oklahoma, southeast; Walla Walla, San Francisco, and Block Island, southwest; Fresno, northwest.

HIGH WINDS.

Wind velocities of 50 miles, or more, per hour were reported at regular stations of the Weather Bureau as follows (maximum velocities are averages for 5 minutes; extreme velocities are gusts of shorter duration):

Stations.	Date.	Velocity.	Direction.	Stations.	Date.	Velocity.	Direction.
		Miles.				Miles.	
Amarillo, Tex.	16	60	w.	Pikes Peak, Colo.	II	84	SW.
Canby, Fort Wash.	8	68	se.	Do	20	90	W.
Chicago, Ill.	26	50	sw.	Portland, Oreg.	2	53	S.
Huron, S. Dak.	9	60	s.	Tatoosh Island, Wash.	2	54	S.
Do	19	60	se.	Do	9	56	S.
Do	27	52	nw.	Winnemucca, Nev.	3	56	S.
Little Rock, Ark.	20	50	ne.				

LOCAL STORMS.

Destructive or severe local storms were reported as follows: **2d.**—Thunder, hail, and wind storms, in Oregon and Washington. A man and horse were killed by lightning at Troutdale, Oreg.

3d.—Windstorms at Kent, Tex., and Grangeville, Idaho.

4th.—Thunderstorm at New London, Conn. Severe local storm at Callaway, Nebr., about 7.30 p. m.; two clouds, one moving from the northwest and the other from the northeast, met about $\frac{1}{2}$ mile from the town, after which the clouds had